

# **BASIC INFORMATION**

## **DESCRIPTION**

Death of heart-muscle cells from reduced or obstructed blood flow through the coronary arteries. Coronary arteries involve the heart muscle, platelets and clotting factors circulating in the blood. Most often affects adults over 40. This is more common in men, but the incidence is rising for women.

### FREQUENT SIGNS AND SYMPTOMS

- Chest pain or "heavy, squeezing or crushing" feeling in the chest
- Pain that radiates from the midchest over the breast bone to the jaw, neck, either arm, the area between the shoulder blades or upper abdomen (sometimes).
- Feeling of impending doom.
- · Shortness of breath.
- · Nausea and vomiting.
- · Sweating.
- · Dizziness.
- · Weakness.
- · Choking sensation.

#### **CAUSES**

Partial or complete blockage of coronary arteries by a blood clot, spasm or contracture; or a severe disruption in the heart's rhythm.

## **RISK INCREASES WITH**

- · Smoking.
- · Obesity.
- · Stress.
- · High LDL cholesterol levels or low HDL cholesterol.
- · High blood pressure.
- Diet that is high in saturated fat,.
- · Diabetes mellitus.
- · Family history of coronary-artery disease.
- · Sedentary lifestyle.
- · Exercise in heat or cold and wind.

### **PREVENTIVE MEASURES**

Avoiding or controlling the risk factors where possible.

## **EXPECTED OUTCOMES**

With immediate emergency care and hospitalization in a coronary-care unit, most persons recover from a first heart attack. Treatment delay is often fatal. Survivors should allow 4 to 8 weeks for recovery. Repeat heart attacks are common.

## **POSSIBLE COMPLICATIONS**

- · Irregular heart rhythms.
- · Shock; pericarditis.
- Congestive heart failure.
- · Pleural effusion.
- · Deep-vein thrombosis.
- · Pulmonary embolism.
- Rupture of the heart septum or wall.
- · Ventricular aneurysm.
- · Risk of future heart attacks.



## **TREATMENT**

## **GENERAL MEASURES**

If you have any symptoms of a heart attack, seek care immediately. Clot-dissolving medicines only work in the first few hours of an attack.

If a heart-attack victim is unconscious and not breathing:

- Yell for help. Don't leave the victim.
- · Have someone call 911 or an ambulance for help.
- · Begin mouth-to-mouth breathing immediately.
- If there is no heartbeat, give external cardiac massage.
- · Don't stop CPR until help arrives.

### Hospitalization:

- Diagnostic tests may include ECG (electrocardiogram) (method of diagnosing heart diseases by measuring electrical activity of the heart), radioactive technetium 99 scan, angiography (study of arteries and veins by injecting material into them that X-rays can outline) and measurement of enzymes released into blood from damaged heart muscle.
- · Oxygen and medications.
- Electrical stimulation to start the heart may be necessary.
- Surgery possibly (pacemaker insertion, balloon angioplasty or coronary-artery bypass graft).
- Additional information available from the American Heart Association, local branch, or call (800) 242-8721.

### **MEDICATIONS**

- Drugs that quickly dissolve the blood clots (must be given within 1-3 hours of attack).
- · Pain relievers.
- Antiarrhythmic and anti-anginal drugs, such as beta-adrenergic blockers or calcium-channel blockers, to stabilize an irregular heartbeat.
- · Anticoagulants to prevent blood clots.
- Nitroglycerin to widen arteries and increase blood supply to the heart.
- Digitalis to strengthen heart-muscle contractions and stabilize the heartbeat.

### **ACTIVITY**

- Resume your normal activities gradually during recovery. Seek medical advice before resuming sexual relations or driving a car.
- Enroll in a cardiac rehabilitation program if available.

### DIET

- Eat a low-fat (less than 20% of total calories) high-fiber diet.
- · Maintain ideal weight. Start a reducing diet if overweight.



# NOTIFY OUR OFFICE IF

- You or a family member has symptoms of a heart attack. This is a life-threatening emergency!
- The following occur during recovery:
  Pain that is not relieved by prescribed medication.

Shortness of breath or cough while at rest.

Shortness of breath of cought wine

Nausea, vomiting, diarrhea, fever. Bleeding from the gums or other sites.

Palpitations or skipped beats.